### *Naphthol in Skin Diseases.*

Prof. KAPOSI, of Vienna, has recently experimented (*Wien. Med. Wochenschr.*, No. 22, 1881) with naphthol in the treatment of skin-diseases. The naphthol used is the β-naphthol of chemists, and was employed either in solution in diluted alcohol, or in ointments. This substance has a therapeutic value in skin-affections similar to that of tar, of which it is a product, but has the great advantage of being almost odourless and colourless when used in a thin layer; and it stains neither the skin nor the hair. An ointment of 10 to 15 per cent. was found efficacious in scabies; and, in the Vienna Hospital, the modified Wilkinson's ointment has been replaced by one for which the following formula has been given: ℞. Naphtholi 15; axung. 100; sapon. vir. 50; cret. alb. p. 10. The advantages claimed for this treatment are that the eczema provoked by the acarus is cured simultaneously with the destruction of the parasite. The simple naphthol ointment was found efficacious in psoriasis; and, as it does not stain the skin and hair, it is especially suitable for psoriasis of the scalp, face, and hands. In eczema, a two and a half per cent. solution in diluted alcohol was found useful in conditions in which tar would have been indicated, and its use in this disease requires similar caution. Professor Kaposi is continuing his experiments with this substance, which promises to be a useful addition to the means at our disposal in the treatment of diseases of the skin.—*British Med. Journ.*, Oct. 8, 1881.

### *Hydrobromic Acid.*

MASSINI (*Correspondenzblatt für Schweizer Aerzte*, Sept. 1881) regards this drug as a valuable acquisition to our stock of remedies. While the indications for its exhibition are the same as those for the other preparations of bromine, such as bromide of potassium, monobromide of camphor, etc., it possesses the advantage over the latter of having a more pleasant taste and of being better borne by weak and sensitive stomachs. The remedy was administered to thirty-one individuals with the following results: in four cases—one of violent neuralgia and sleeplessness, associated with cardiac disease, one of insomnia in an insane person, and two of aggravated hypochondriasis—it was of no value; moderate relief was afforded in seven cases—hypochondria with palpitation of the heart, hysteria with the same complication, nervous hyperemesis, hysteria with insomnia, the same with congestions at the menopause, hysteria with intense vertigo, and anæmia in a youth suffering from violent headache upon the least exertion. The acid was productive of marked and sometimes lasting benefit in the remaining twenty cases, comprising examples of nervous palpitation of the heart, insomnia, cerebral congestion and dizziness, paroxysmal headache in an individual affected with multiple sclerosis, congestive toothache occurring during pregnancy, persistent hyperemesis, hysteria, and, finally, pollutions from onanism. The remedy is best given about fifteen minutes after meals, in doses of ten drops of the concentrated (twenty-five per cent.) solution, or twenty to thirty drops of the dilute (ten per cent.) solution, well diluted with sweetened water. No unpleasant after-effects were observed.—*Med. Record*, Nov. 12, 1881.

## MEDICINE.

### *The Nature of Diphtheritic Contagium.*

Prof. H. C. WOOD recently read before the Academy of Natural Sciences of Philadelphia an abstract of some researches made with Dr. Formad, at the suggestion of the National Board of Health, as to the nature of the contagium of diphtheria, and, as the full account of the experiments will not appear until the publication of his memoir by the National Board, the authors ask that criticism be withheld until then. Their first experiments, made in 1880, by attempting to inoculate rabbits by inserting fragments of diphtheritic membrane under the skin, gave negative results, the animals dying from tuberculosis; insertion of the dipththeritic membrane, however, into the trachea frequently produced a severe tracheitis, attended by the formation of a false membrane identical in character with that formed in diphtheria. It was then next determined that other severe non-specific inflammations of the trachea were attended by the formation of pseudo-membrane, not differing from the membrane of diphtheria except that the micrococci were not so abundant; they therefore concluded that the production of false membrane is of itself no evidence of any specific action.

In examining cases dying from malignant diphtheria, the authors found that the blood in all instances was more or less full of micrococci, some free, others in zoogloea masses, others in the white corpuscles; they were also found in the internal organs, especially in the kidneys, where they formed numerous thrombi. Inoculations practised on animals with the material from these malignant cases were in all instances followed by a grayish exudation at the seat of inoculation, with much inflammation, and subsequently death. The blood also during life and after death contained micrococci similar to those found in the cases of diphtheria; they were also found in abundance in the internal organs. Studies made upon the blood in these experiments, and in the cases of malignant diphtheria, showed in both cases that the micrococci first attack the white corpuscles, in which they move with a vibrating motion. Under their influence the corpuscles lose their granular appearance, and finally become full of micrococci, which now are quiescent, and increase until the corpuscle bursts, and the contents escape as an irregular transparent mass full of micrococci, and form the so-called zoogloea masses. In the diphtheritic membrane the micrococci frequently exist in balls, which are merely leucocytes full of the plant. The bone-marrow of the animals was found full of leucocytes and cells containing micrococci.

The authors concluded that the disease produced in animals by inoculation was diphtheria from the facts that the symptoms and post-mortem lesion were identical, and that the disease retained its contagious character.

In their efforts to determine whether the micrococci were the cause of diphtheria, following the method of Letzerich, the authors found that when the urine of diphtheria patients containing micrococci was filtered, and the dried filter-paper inserted under the skin, malignant diphtheria was produced, and, further, cultivated micrococci up to the second generation are capable of producing diphtheria inoculation. They therefore conclude that the essential poison of malignant diphtheria is found in the micrococci, which must be either the poison itself or the carriers or producers of the poison.

From their culture experiments the authors conclude that the only detectable difference between the micrococci found in ordinary sore-throat and diphtheria is in their reproductive activity, the former ceasing their reproduction at the third transplantation, while the latter grew rapidly up to the tenth generation; they are therefore the same organisms in different states.

The difference, therefore, between a simple angina and a malignant diphtheria, in both of which micrococci are present, is simply dependent upon the reproductive activity of the plant, and the malignancy is in direct proportion to that activity. This identity of the organisms is further established by the fact that, when a membrane from a malignant case of diphtheria is dried, it loses in malignancy of contagiousness in proportion as its micrococci lose in activity, so that a virulent membrane may become inert, its micrococci not only looking like those of an ordinary angina, but behaving like them.

We will await with interest the complete account of the author's interesting researches and the results promised from the investigations of the conditions outside of the body which favour the production of active micrococci, and the effects of agents in killing these organs.—*Philadelphia Medical Times*, Oct. 22, 1881.

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### *Pilocarpine in Diphtheria.*

Dr. ADOLPH FASANO, in a recent number of the *Giornale Internazionale delle Scienze Mediche*, offers some observations on the use of pilocarpine in diphtheria, a mode of treatment which has been said to be attended with the most favourable results. He quotes the reports of Dr. Guttman, who extols most highly the use of pilocarpine in this malady. Dr. Guttman administers it internally in solution in the form of hydrochlorate combined with pepsin, the dose varying according to the age of the patients. Dr. Fasano also quotes a case reported by Professor Cantani as having been treated successfully by pilocarpine alone. Professor Lepidi-Chioti, who has reported this case in all its particulars, describes two other cases of the same kind which were equally benefited. But it is stated that large doses may disturb the stomach and cause spasm and vomiting, and therefore it is necessary to be very careful in the mode of administering the drug. The anti-diphtheritic properties of pilocarpine are said to be due to the great salivation induced, by which means the detachment of the false membrane is much accelerated, and thus the course of the disease is shortened. Lepidi-Chioti also regards the sweating as a true depurative, eliminating a quantity of the virus circulating in the blood, in the same way as pyrogenic matters are expelled by the perspiration in fevers. The human skin is a true filter, and, as such, various products are eliminated by it from the system. The success of pilocarpine is therefore due, according to some authors, to the salivation detaching the false membrane, or, according to Lepidi-Chioti, to the copious perspiration. Dr. Fasano, in relating these views, adds his own testimony to the efficacy of pilocarpine in diphtheria, but proposes some questions as to the theoretical reasoning on which the treatment is founded; and he gives his opinion, in the first place, that the detachment of the false membrane, although an important element in the treatment, is by no means the only curative object to be attained. He asks, accordingly, to be informed as to the exact therapeutical value of the detachment of the false membrane, and whether it is certain that the diphtheritic virus, circulating in the blood and in many of the internal organs, is really eliminated with the sweat. Again, if it be admitted that it is eliminated, is it all eliminated ? and has pilocarpine a local and general antiseptic action which enables it to destroy the products and the factors of the diphtheritic virus ? If an explicit and experimental solution of these doubts should be afforded, then, Dr. Fasano thinks, it may be said that a great remedy has been discovered for diphtheria; and the easy administration of pilocarpine, its rapid action and its innocuous nature, are so many further recommendations for its use. In the mean time, he himself proposes to make further trials of the remedy, and recommends his colleagues to do the same, and if trustworthy results should confirm the observations of Lepidi-Chioti, Dr. Fasano, regarding the ultimate object, namely, the cure, will withdraw the doubts which he now entertains on the subject.—*Med. Times and Gazette*, Nov. 19, 1881.

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### *Bacillus of Enteric Fever.*

In the *Arch. für Exper. Path. und Pharm.*, Band xii. p. 234, Professor KLEBS published some preliminary observations on this point, and he now (*Arch. für Exper. Path. und Pharm.*, Band xiii. Heft 5, 6) gives a full account